MARTHA E. ALLEN

Hull 803
Inboard Profile

MARTHA. E. ALLEN.

~~S.S. "HARRY COULBY"~~
~~CLV. 392.~~

GEN. BOX No 726.

010933-010942-0131

© 2021
Lloyd's Register
Foundation

MAIN MAST NO RAKE
FORE MAST NO RAKE
TRUNK TOP
B^HD ANGLES 3"x3"x8.3# DOUBLE
15"x3.4x35# CHAN^L
T.G-6
T.G-5
T.G-4
T.G-3
A.C.D.
PUMP ROOM
DOUBLE 8"x3½"x22.8# CHAN^L STANCHIONS
8"x3½"x22.8# CHAN^L
3"x3"x7.2# SINGLE
MAIN DECK AT SIDE
16.3# BRACKETS
C.V.K-7
C.V.K-6
C.V.K-5
C.V.K-4
C.V.K-3
C.V.K-2
C.V.K-1
HOLD STRINGER
PILOT HOUSE
14'-3"
12'-0"
2'-0"
18'-0"
8'-0"
ACCOMMODATIONS
CARGO HATCH 9'-0" x 10'-0"
FORECASTLE DECK
10"x3½"x24.9# BULB ANGLE BEAMS
STORE ROOM
PAINT ROOM
OILSKIN ROOM
LAMP ROOM
MAIN DECK
10"x3½"x21.9# CHAN^L HEADER
9"x3½"x22.7# BULB ANGLE BEAMS
CHAIN LOCKER
W.T. FLAT
PUMP ROOM PORT SIDE ONLY
SWASH PLATE
4"x4"x11.8# ANGLE STANCHIONS
7½"x3"x17.1# BULB ANGLES
FORE PEAK FLOORS 15#
FLANGED
WOOD SHEATHING ON FLOORS
32'-6"
11'-0"
7'-6"
AP
F.P.
O.T. B^HD
W.T. B^HD
WEB
6 FRAMES @ 2'-0" = 12'-0"
28 FRAMES @ 30" = 70'-0"
84 FRAMES @ 27½" = 132'-6"
17 FRAMES @ 27" = 38'-3"
8 FRAMES @ 2'-0" = 16'-0"
30"
17'-3"
62'-6" ENGINE ROOM
FUEL BUNKER 5'-6"
PUMP ROOM 9'-2"
36'-8" No 5 TANK
36'-8" No 4 TANK
36'-8" No 3 TANK
36'-8" No 2 TANK
36'-8" No 1 TANK
COFFERDAM 4'-6"
33'-3" FORE HOLD
18'-6" FORE PEAK

''MARTHA E ALLEN''

STR No 803

''MARTHA E ALLEN''

INBOARD PROFILE

PRINT No	4145	DRAWING No 10
ISSUED	SEP 16 1927	

SCALE ¼" = 1'-0"

SEPT-15-1927	TRACING No
Am.S.B.Co	803-10

010933-010942-0131

© 2021
LR Lloyd's Register Foundation

Hull 803
Main Deck

109

010933-010942-0130

© 2021
Lloyd's Register Foundation

STRINGER SEAM STRAPS. 5¼" × 15·5" ¾ RIVS.
" BUTT " 9¾" × 15·5" "
DECK SEAM STRAPS 5¼" × 12·3" "
" BUTT " 5¼" × 12·3" "
W.T. FLAT.
MOTOR
CASING
COFFERDAM
PUMP
ROOM
Nº 5 TANK.
Nº 4 TANK.
Nº 3 TANK.
Nº 2 TANK.
Nº 1 TANK.
COFFERDAM
OIL TRUNK
M.D.S. "3. 13·9"
16¾" × 23·7" STRAP ⅞ RIVS.
O T BHD

FRAME SPACING 24" — FRAME SPACING 30" — FRAME SPACING 27½"

BEAMS. 10" × 3½" × 26·9" B.A. KNEES 30" × 18" 7-⅞" RIVETS. — BEAMS. 6½" × 3" × 13·6" B.A. KNEES 19½" × 17·1" 5-¾" RIVETS. — DECK LONGITUDINALS. 7" × 3" × 15·3" B.A.

FRAMES. 7" × 3½" × 15·3" B.A.

FRAME SPACING 27½" — FRAME SPACING 27" — FRAME SPACING 24"

DECK LONGITUDINALS 7" × 3" × 15·3" B.A. — BEAMS 9" × 3½" × 22·7" B.A. KNEES 27" × 18", 6-⅞" RIVS. — BEAMS 6½" × 3" × 13·6" B.A. KNEES. 19½" × 16·3" 5-¾" RIVS.

FRAMES. 7" × 3½" × 15·3" B.A.

RIVETING SCHEDULE.

LOCATION.	DIA.	PITCH.	
LONGITUDINALS TO DECK.	¾"	4½"	
BEAMS.	¾"	4½"	
O.T. BHD ANGLES TO DECK.	¾"	3¾"	
BUTTS.	⅞"	3½"	
"	¾"	3"	
LANDINGS.	⅞"	3½"	
"	¾"	3"	
DK. HOUSE FOUNDTNS TO DECK.	¾"	3¾"	
STRINGER ANGLE TO DECK. 6" × 6"	⅞"	4⅜"	ZIG-ZAG.
" " " " 3" × 3".	¾"	3¾"	
TRUNK SIDE ANGLE TO DECK	⅞"	4⅜	ZIG-ZAG.
BRACKET CLIPS. OUTBOARD.	7-¾ RIVETS.		
" " INBOARD.	8-¾ RIVETS.		

APPROVED
SEP 8 1927
LLOYD'S REGISTER OF SHIPPING
NEW YORK

J. French

Rpt 430
"Martha E. Allen"

STR. Nº 803

MAIN DECK.

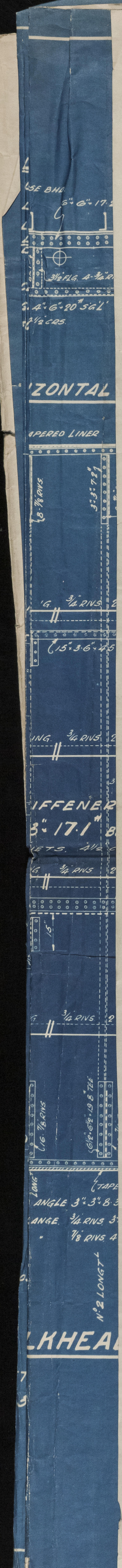
PRINT. Nº 4098
ISSUED. AUG 31 1927
DRAWING Nº 12.
SCALE ¼" = 1 FOOT.
AUG. 26TH 1927.
Am. S. B. Co.
Phil Moonan
TRACING Nº 803-12

Nº. 803.
MAIN DECK.

010933-010942-0130

010933-010942-0134

Hull 803
Midship Section



SE BHD
6"·6"·17·2
3½"FLG. 4-⅞"R
4"·6"·20"SG'L'
3½ CRS.
ZONTAL
APERED LINER
8-⅞"RIVS
3"·3"·7·2
3/4 RIVS
15"·3·6"·45
ING.
3/4 RIVS
IFFENER
3"·17·1"
ETS.
3/4 RIVS
15"
3/4 RIVS
16-⅞"RIVS
6½"·6½"·19.8"TEE
TAPE
LONG
ANGLE 3"·3"·8·3
ANGE. 3/4 RIVS
⅞ RIVS
Nº2 LONGT'L
LKHEAD

EQUIPMENT.

2 STOCKLESS ANCHORS (BOWER)	5600 LBS.
1 STREAM ANCHOR (EX STOCK)	1680 LBS.
1 KEDGE ANCHOR (EX STOCK)	840 LBS.

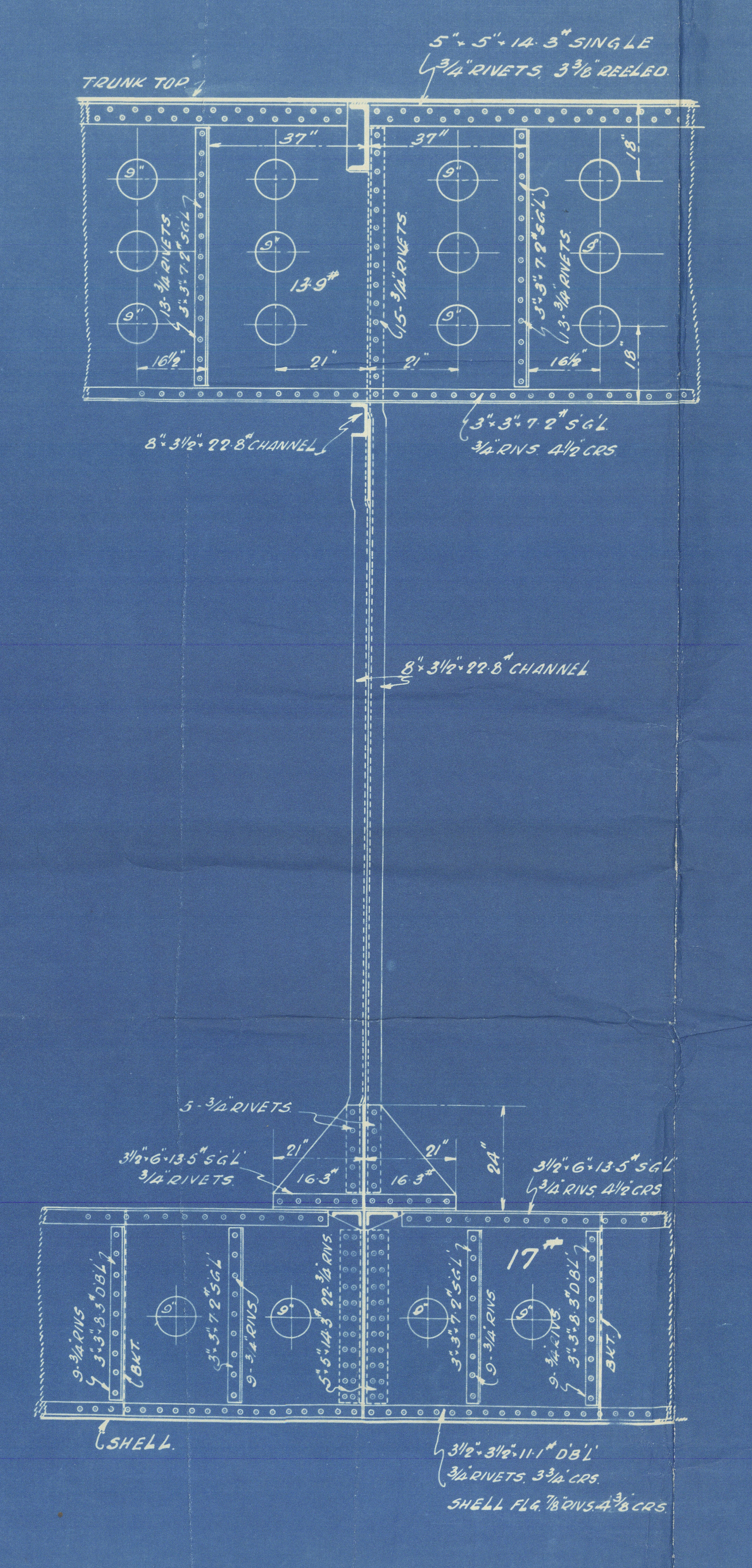
180 FATHOMS, 2 1/16" STUD LINK CHAIN.
90 " 4 1/2" STREAM WIRE LINE.
120 " 4 1/2" WIRE TOW LINE.
2 PIECES, 90 FATHOMS, 7" MANILLA WARP.
2 " 90 " 7" HAWSER.

LLOYD'S NUMERALS.

D = 18·50
L × D = 6179.
L × (B + D) = 23213.
$\frac{L}{D}$ (TRUNK TOP) = $\frac{334}{25·08}$ = 13·31.

CLASS LLOYD'S 100. A. 1.
"GREAT LAKES SERVICE"
FOR CARRIAGE OF PETROLEUM IN BULK.

CAMBER IN DECK AND
TRUNK ROOF 12" IN 25'6"



TRUNK TOP
SHELL

ELEVATION AT CR. LINE.

J

SHEER STRAKE 78" × 19·6# FOR 1/2 LGT. ℄ TO 18# AT ENDS.
SINGLE OUTSIDE BUTTSTRAPS.
16 3/4" × 24·5# TREBLE RIVETED, 7/8" RIVS.

H

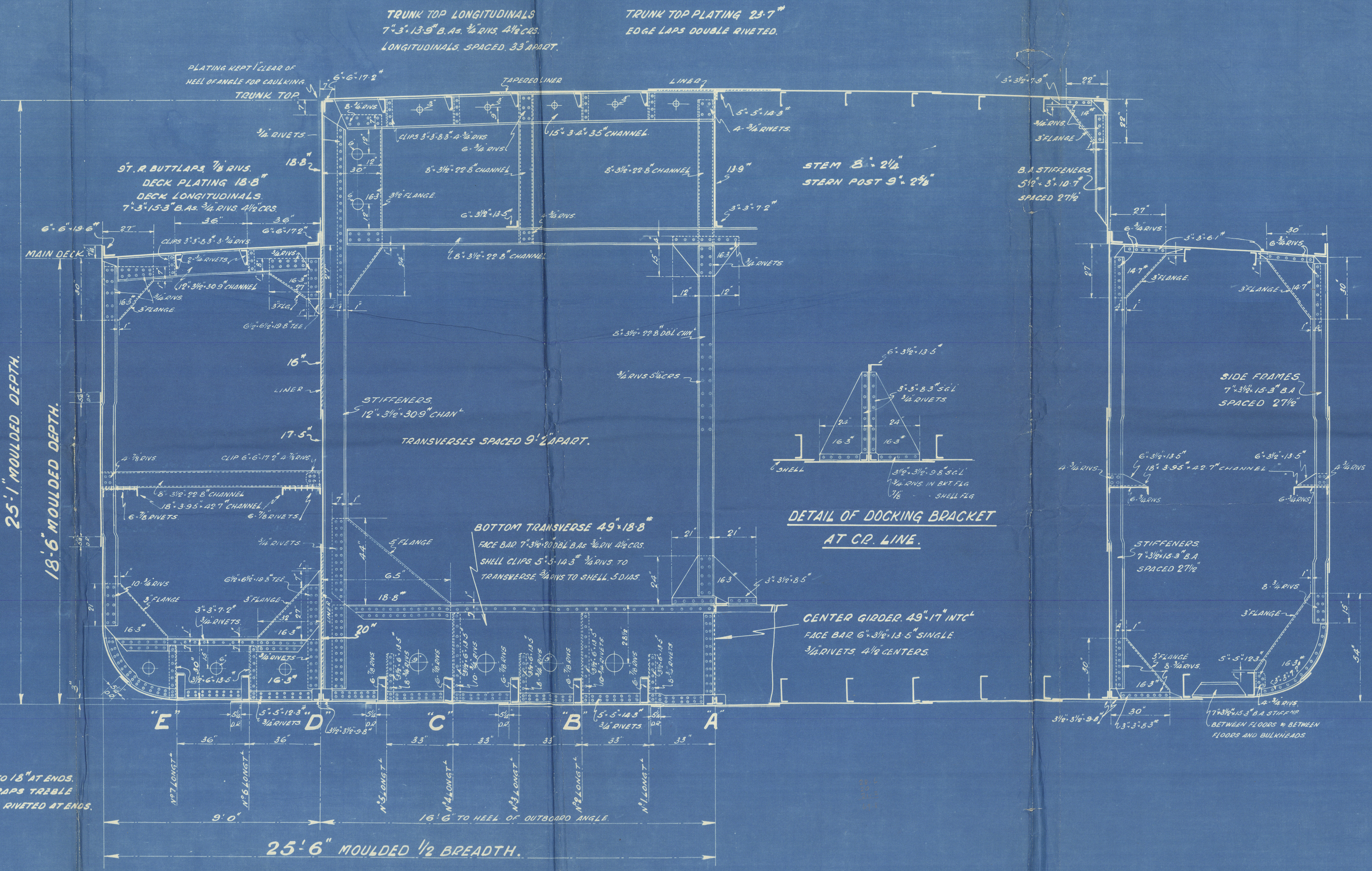
19·6# FOR 1/2 LGT ℄ TO 18# AT ENDS.
TREBLE RIVETED BUTTLAPS TO
DOUBLE RIVETED AT ENDS. 7/8" RIVETS.

G

21·2# FOR 1/2 LGT. ℄ - 18# AT ENDS.
TREBLE RIVETED BUTTLAPS TO
DOUBLE RIVETED AT ENDS. 7/8" RIVS.

E

21·2# FOR 1/2 LGT ℄ TO 18# AT ENDS.
26" SINGLE BUTTSTRAPS TREBLE
RIVETED TO DOUBLE RIVETED AT ENDS.



TRUNK TOP LONGITUDINALS
7" × 3" × 13·9# B. As. 3/4" RIVS. 4 1/2" CRS.
LONGITUDINALS SPACED 33" APART.
TRUNK TOP PLATING 23·7#
EDGE LAPS DOUBLE RIVETED.
PLATING KEPT 1" CLEAR OF
HEEL OF ANGLE FOR CAULKING.
TRUNK TOP
6" × 6" × 17·2#
TAPERED LINER
LINER
9T. R. BUTTLAPS 7/8" RIVS.
DECK PLATING 18·8#
DECK LONGITUDINALS.
7" × 3" × 15·3# B. As. 3/4" RIVS. 4 1/2" CRS.
6" × 6" × 19·6#
MAIN DECK
CLIPS 3" × 3" × 8·3# - 3 - 3/4" RIVS.
12" × 3 1/2" × 30·9# CHANNEL
15" × 3·4" × 35# CHANNEL
8" × 3 1/2" × 22·8# CHANNEL
5" × 5" × 14·3#
4 - 3/4" RIVETS.
STEM 8" × 2 1/4"
STERN POST 9" × 2 5/8"
B. A. STIFFENERS.
5 1/2" × 3" × 10·7#
SPACED 27 1/2"
8" × 3 1/2" × 22·8# DBL' CHN'
STIFFENERS.
12" × 3 1/2" × 30·9# CHAN'
TRANSVERSES SPACED 9'2" APART.
BOTTOM TRANSVERSE 49" × 18·8#
FACE BAR 7" × 3 1/2" × 20# DBL' B As. 3/4" RIV. 4 1/2" CRS.
SHELL CLIPS 5" × 5" × 14·3# 3/4" RIVS. TO
TRANSVERSE. 3/4" RIVS. TO SHELL. 5 DIAS.
CENTER GIRDER. 49" × 17# INTC'
FACE BAR 6" × 3 1/2" × 13·5# SINGLE
3/4" RIVETS. 4 1/2" CENTERS.
SIDE FRAMES.
7" × 3 1/2" × 10·5# B.A.
SPACED 27 1/2"
STIFFENERS
5" × 3 1/2" × 9·8# B.A.
SPACED 27 1/2"
25'1" MOULDED DEPTH.
18'6" MOULDED DEPTH.
"E"
"D"
"C"
"B"
"A"
9'0"
16'6" TO HEEL OF OUTBOARD ANGLE.
25'6" MOULDED 1/2 BREADTH.
6" × 3 1/2" × 13·5#
3" × 3" × 8·3# S.G.L.
3/4" RIVETS.
24"
16·3#
SHELL
3 1/2" × 3 1/2" × 9·8# S.G.L.
3/4" RIVS. IN BKT. FLG.
7/8" " - SHELL FLG.

DETAIL OF DOCKING BRACKET AT CR. LINE.

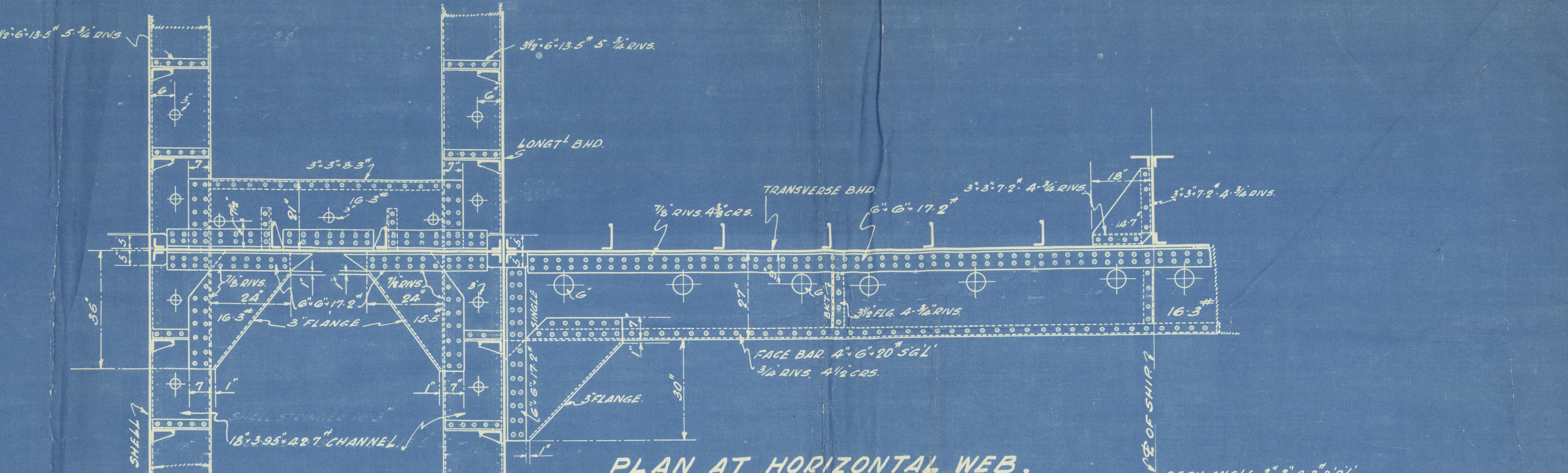
BOTTOM LONGITUDINALS.
12" × 3 1/2" × 30·9# CHANNELS.

B, C & D, STRAKES.

21·2# FOR 1/2 LGT ℄ TO 18# AT ENDS.
26" SINGLE BUTTSTRAPS TREBLE
RIVETED TO DOUBLE RIVETED AT ENDS.

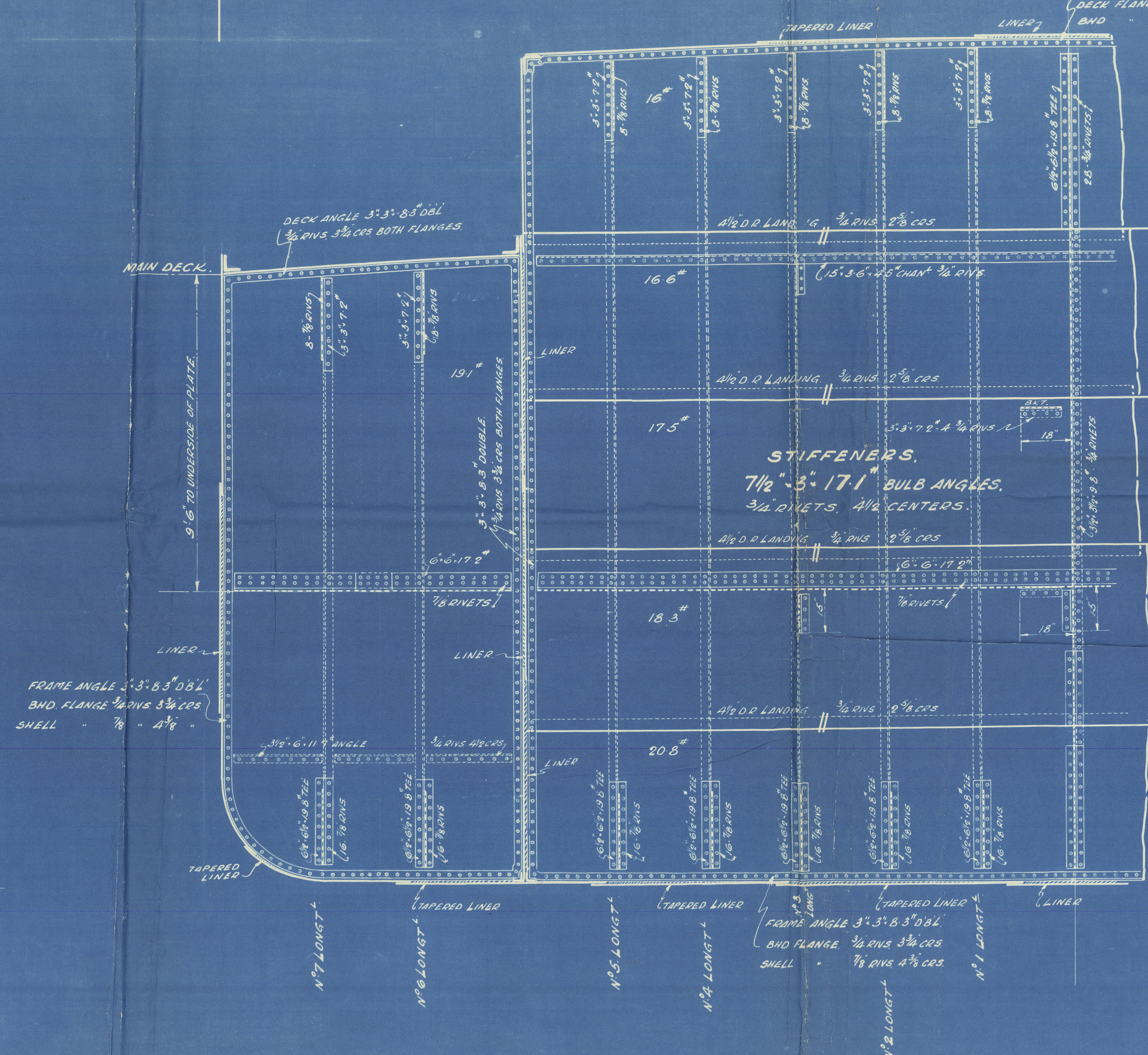
KEEL PLATE.

55 1/2" × 28·6# FOR 3/5 LGT. ℄
TO 22# AT ENDS.
BUTTSTRAPS TREBLE RIVETED
TO DOUBLE RIVETED AT ENDS.
INSIDE STRAPS KEPT 1" CLEAR OF
BHD. BOUNDARY ANGLES.
OUTSIDE BUTTSTRAPS. 16 3/4" × 20#
INSIDE BUTTSTRAPS. 16 3/4" × 17·1# 7/8" RIVS.
KEEL ANGLES. 3 1/2" × 3 1/2" × 11·1# TO 9·8# AT ENDS.



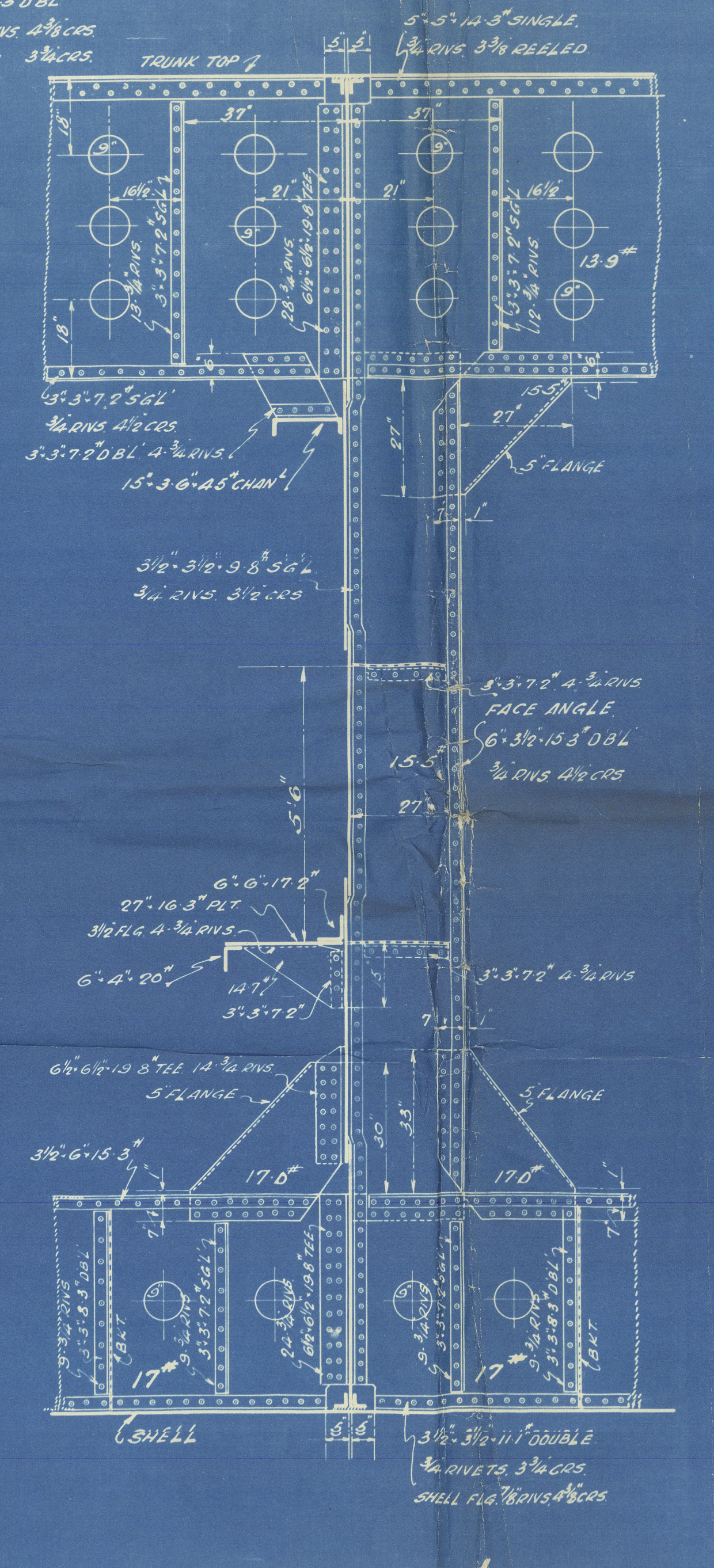
18" × 3·95 × 42·7# CHANNEL.
SHELL
3" FLANGE.
3/4" RIVS. 4 1/2" CRS.
℄ OF SHIP

PLAN AT HORIZONTAL WEB.



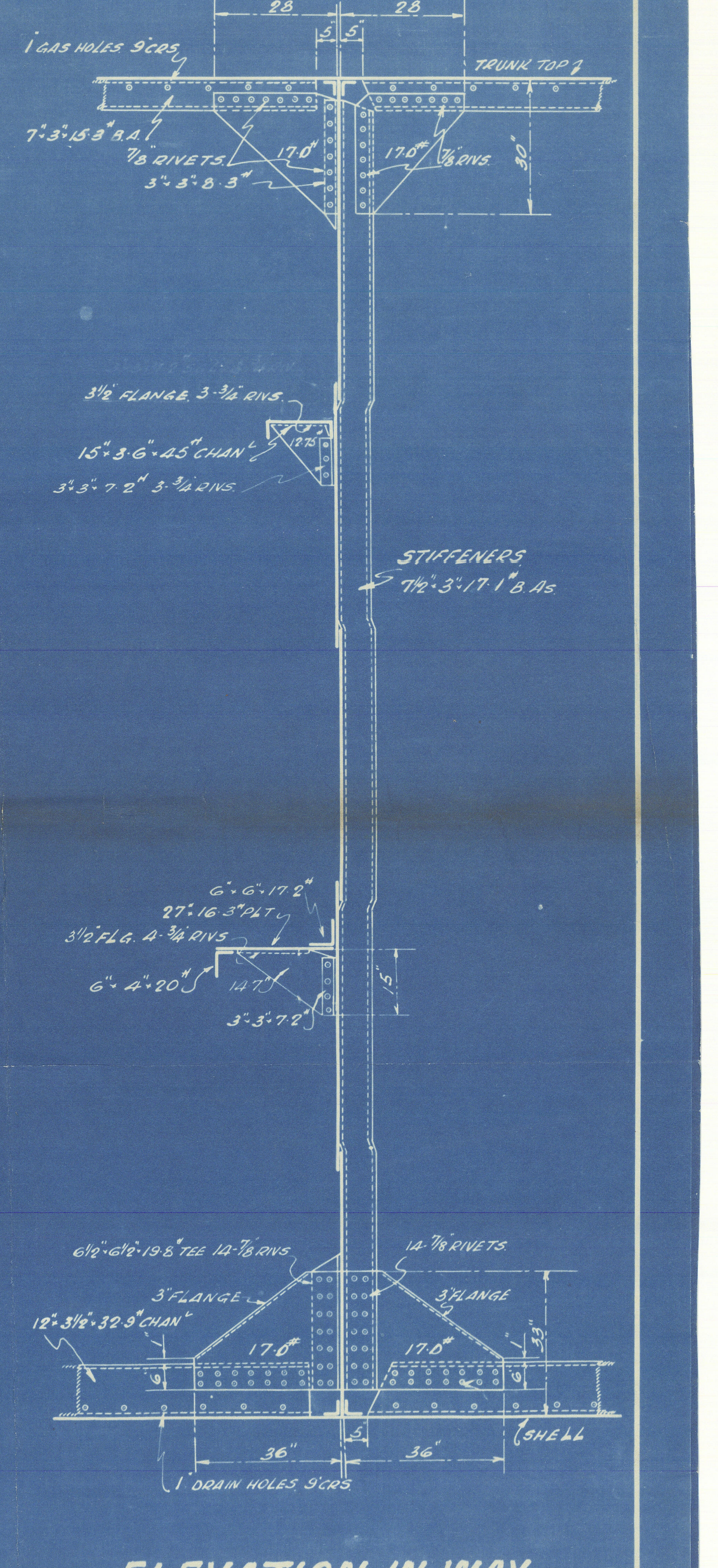
DECK ANGLE 3" × 3" × 8·3# D'BL'
DECK FLANGE 7/8" RIVS.
BHD
TAPERED LINER
LINER
MAIN DECK.
DECK ANGLE 3" × 3" × 8·3# DBL'
3/4" RIVS. 3 3/4" CRS. BOTH FLANGES.
9'6" TO UNDERSIDE OF PLATE.
16#
16·6#
19·1#
17·5#
18·3#
20·6#
4 1/2" D. R. LANDING. 3/4" RIVS. 2 5/8" CRS.
15" × 3·6" × 45# CHAN' 3/4" RIVS.
3" × 3" × 8·3# DOUBLE.
3/4" RIVS 3 3/4" CRS BOTH FLANGES.
LINER
STIFFENERS.
7 1/2" × 3" × 17·1# BULB ANGLES.
3/4" RIVETS. 4 1/2 CENTERS.
6" × 6" × 17·2#
7/8" RIVETS.
SHELL
TAPERED LINER

MIDSHIP TYPE O.T. BULKHEAD.



TRUNK TOP
SHELL

ELEVATION OF ℄ WEB.



ELEVATION IN WAY OF LONGITUDINALS.

Rgt 4 30
"Martha E.
Allen"

PRINCIPAL DIMENSIONS.

LENGTH OVERALL .... 344'0"
LENGTH ON KEEL .... 334'0"
LENGTH. B.P. .... 334'0"
BREADTH MOULDED .... 51'0"
DEPTH MOULDED .... 18'6"
DESIGNED DRAFT .... 16'6"

APPROVED
SEP 9 1927
LLOYD'S REGISTER OF SHIPPING
NEW YORK

J French

STR. No	803	
MIDSHIP SECTION.		
PRINT No	4107	DRAWING No 3
ISSUED.	SEP 6 1927	
SCALE 1/2" = 1 FOOT.		
AUG. 5th 1927.	Phil. Moonan.	TRACING No.
Am. S. B. Co.		803-3.

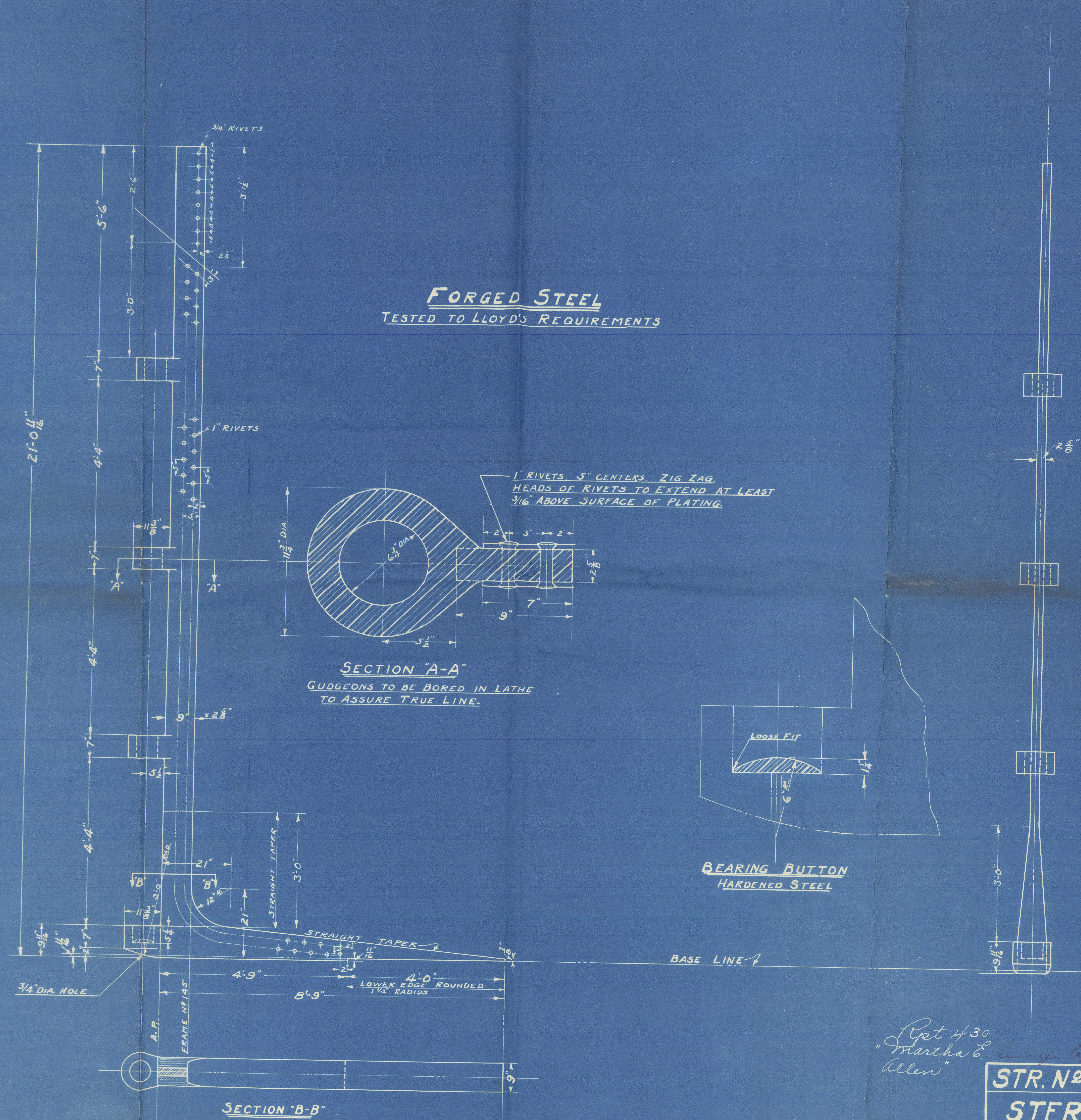
Hull 803
Sternpost

0133

© 2021
Lloyd's Register
Foundation

FORGED STEEL

TESTED TO LLOYD'S REQUIREMENTS


3/4" RIVETS
21'-0 11/16"
5'-6
2'-6"
3'-1 1/2"
4"
2"
2 1/4"
3"
3'-0
7"
1" RIVETS
4'-4
5"
2"
11 3/4"
"A"
"A"
4'-4"
9" × 2 5/8"
7"
5 1/2"
4'-4"
RAD.
21"
"B"
"B"
3'-0
12" R.
STRAIGHT TAPER
3'-0"
21"
11
5 1/4
9 11/16"
11/16"
2"
STRAIGHT TAPER
2 1/2"
11/16"
7/8"
3/4" DIA. HOLE
4'-9"
2"
4'-0"
LOWER EDGE ROUNDED 1 1/4" RADIUS
8'-9"
A.P.
FRAME Nº 145
9"
11 3/4" DIA.
6 3/4" DIA.
2"
3"
2"
2 5/8"
7"
9"
5 1/2"
LOOSE FIT
1 1/4"
6"
BASE LINE
2 5/8"
3'-0"
9 11/16"

1" RIVETS. 5" CENTERS. ZIG ZAG.
HEADS OF RIVETS TO EXTEND AT LEAST 3/16" ABOVE SURFACE OF PLATING.

SECTION "A-A"

GUDGEONS TO BE BORED IN LATHE TO ASSURE TRUE LINE.

BEARING BUTTON

HARDENED STEEL

SECTION "B-B"

Rpt 430
"Martha E. Allen"

Surveyor Copy

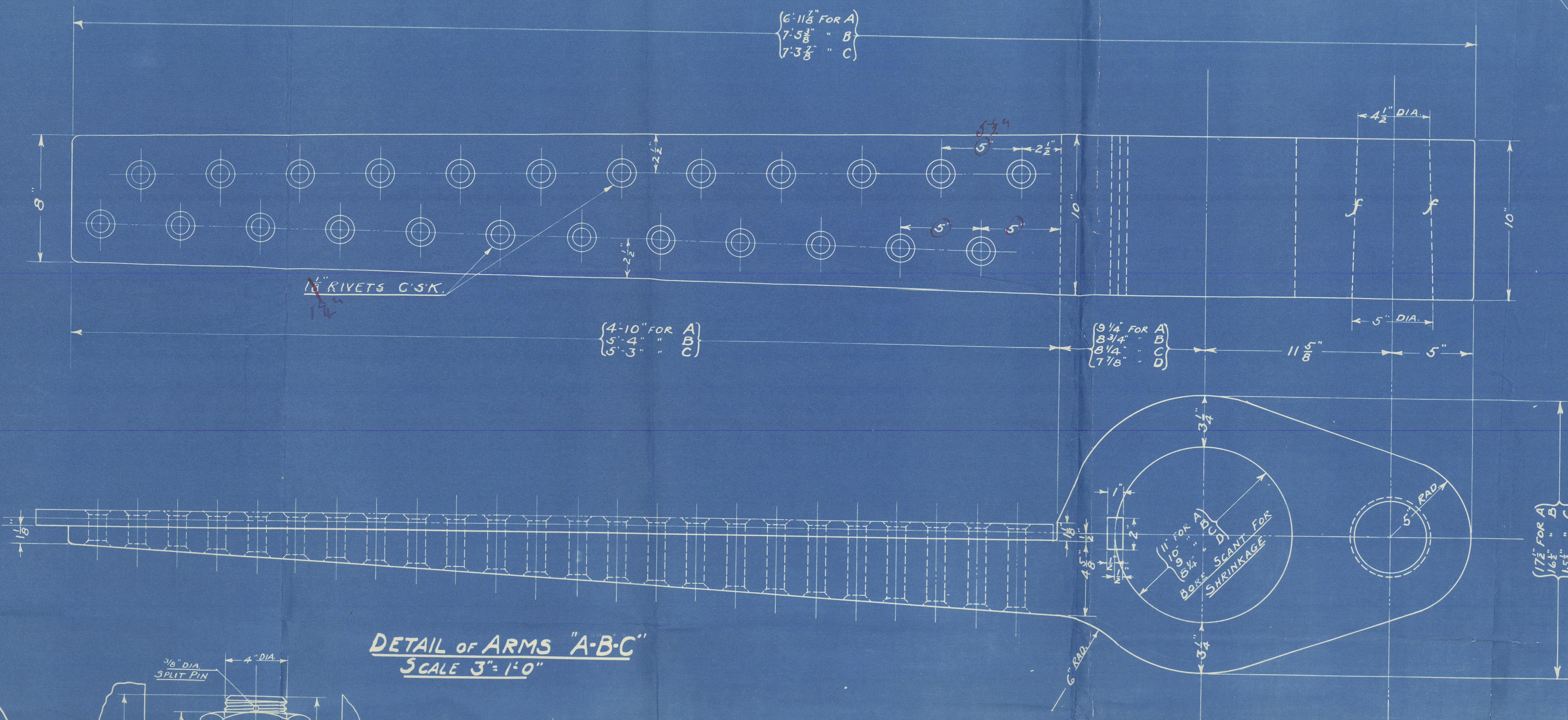
M.B.

APPROVED
SEP 20 1927
LLOYD'S REGISTER OF SHIPPING
NEW YORK

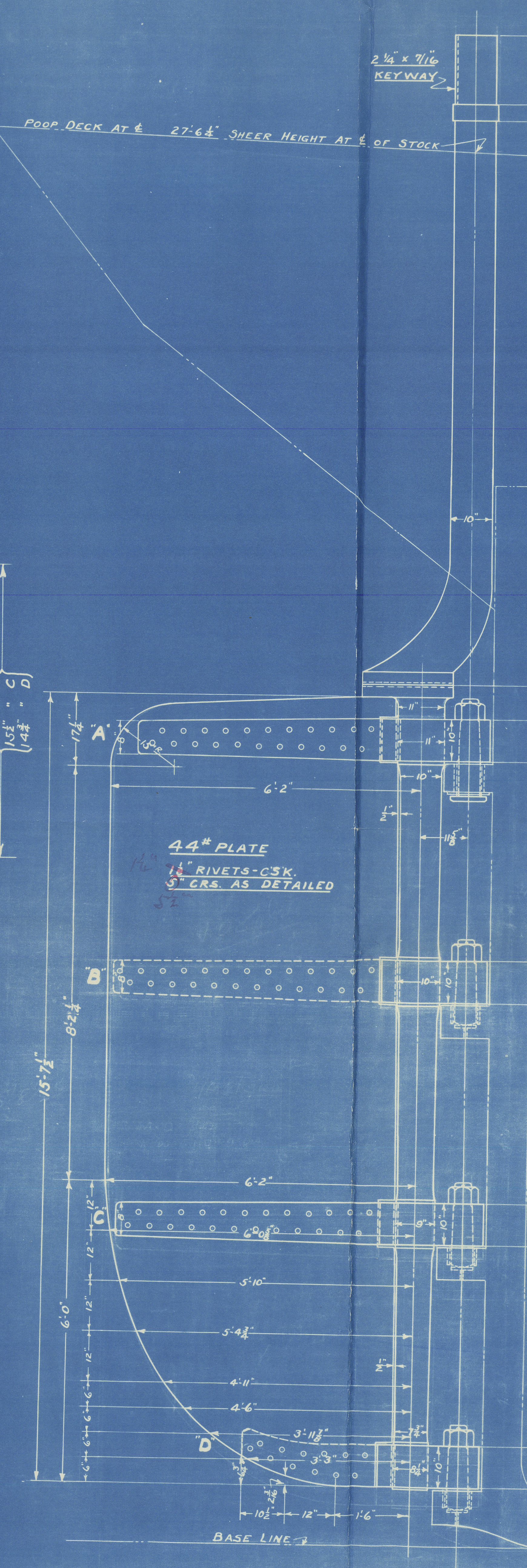
J. French

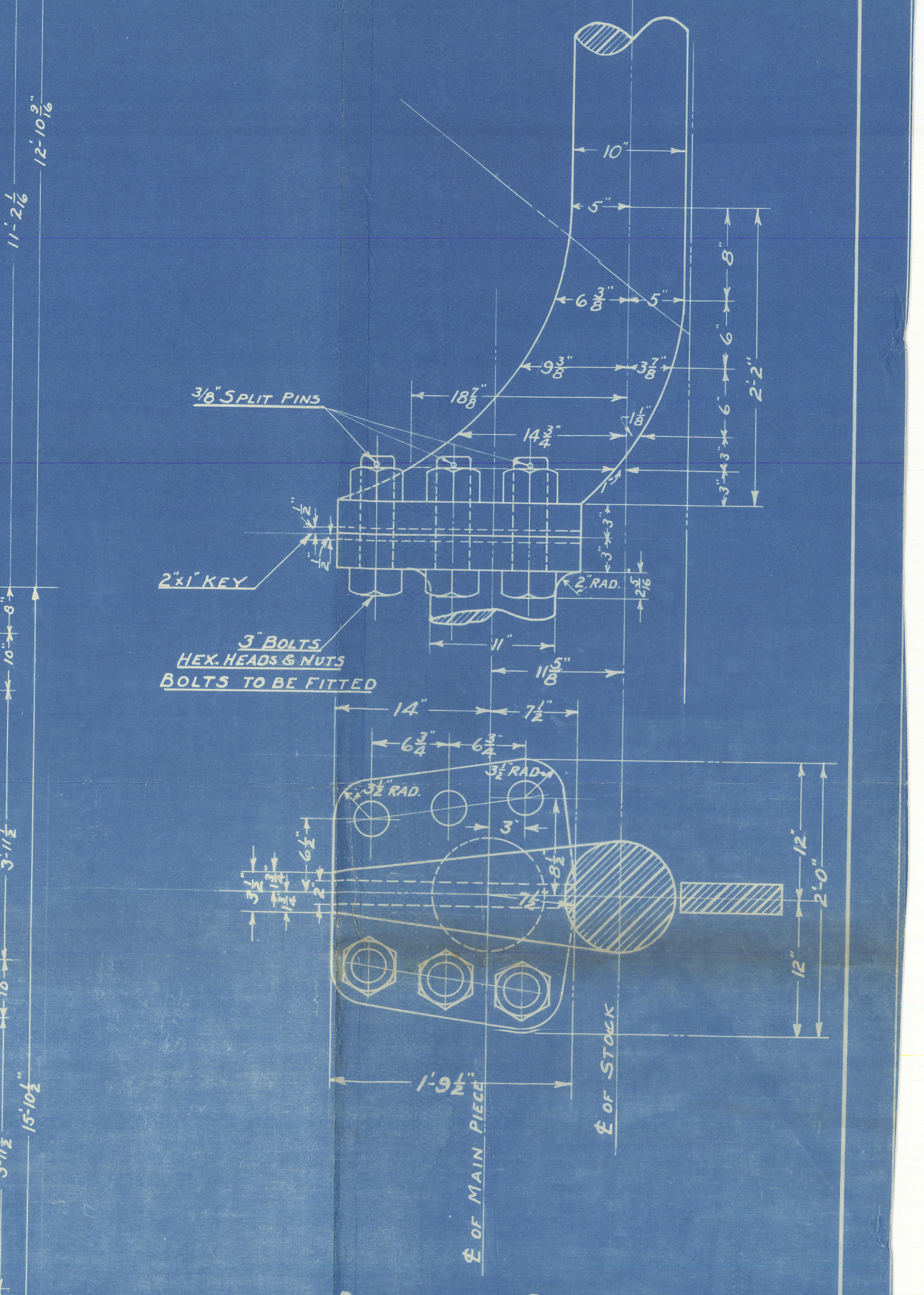
STR. Nº	803
STERN POST	
PRINT Nº 4136 ISSUED SEP 14 1927	DRAWING Nº 6
SCALES 3/4" & 3" = 1'-0"	
SEPT. 14, 1927 Am. S. B. Co.	E.B.M.
TRACING Nº 803-6	

010933-010942-0133

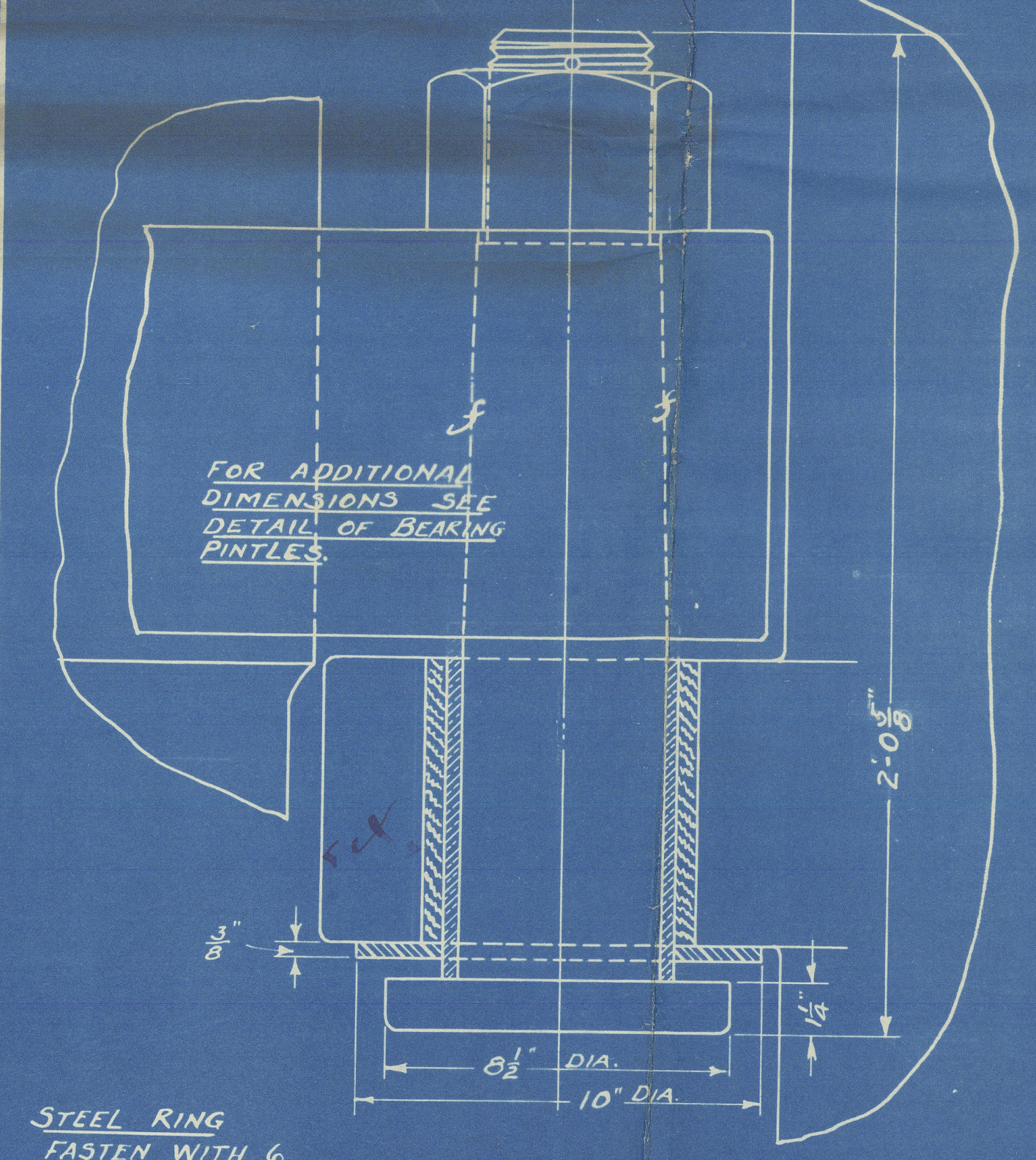

6'-11⅝" FOR A
7'-5⅝" " B
7'-3⅝" " C
1⅛" RIVETS C'SK
4-10" FOR A
5'-4" " B
5'-3" " C
9¼" FOR A
8¼" " B
8¼" " C
7⅞" " D
4½" DIA
5" DIA
BORE SCANT FOR SHRINKAGE
6" RAD
5" RAD
17½" FOR A
16½" " B
15½" " C
14¾" " D

DETAIL of ARMS "A-B-C"
SCALE 3" = 1'-0"


2¼" × 7/16 KEYWAY
POOP DECK AT ℄ 27'-6¼" SHEER HEIGHT AT ℄ OF STOCK
11'-2 1/16
12'-10 9/16
"A"
"B"
"C"
"D"
6'-2"
44# PLATE
1⅛" RIVETS-C'SK.
5" CRS. AS DETAILED
8'-2¼
15'-7½
15'-10½
3'-11½
BASE LINE

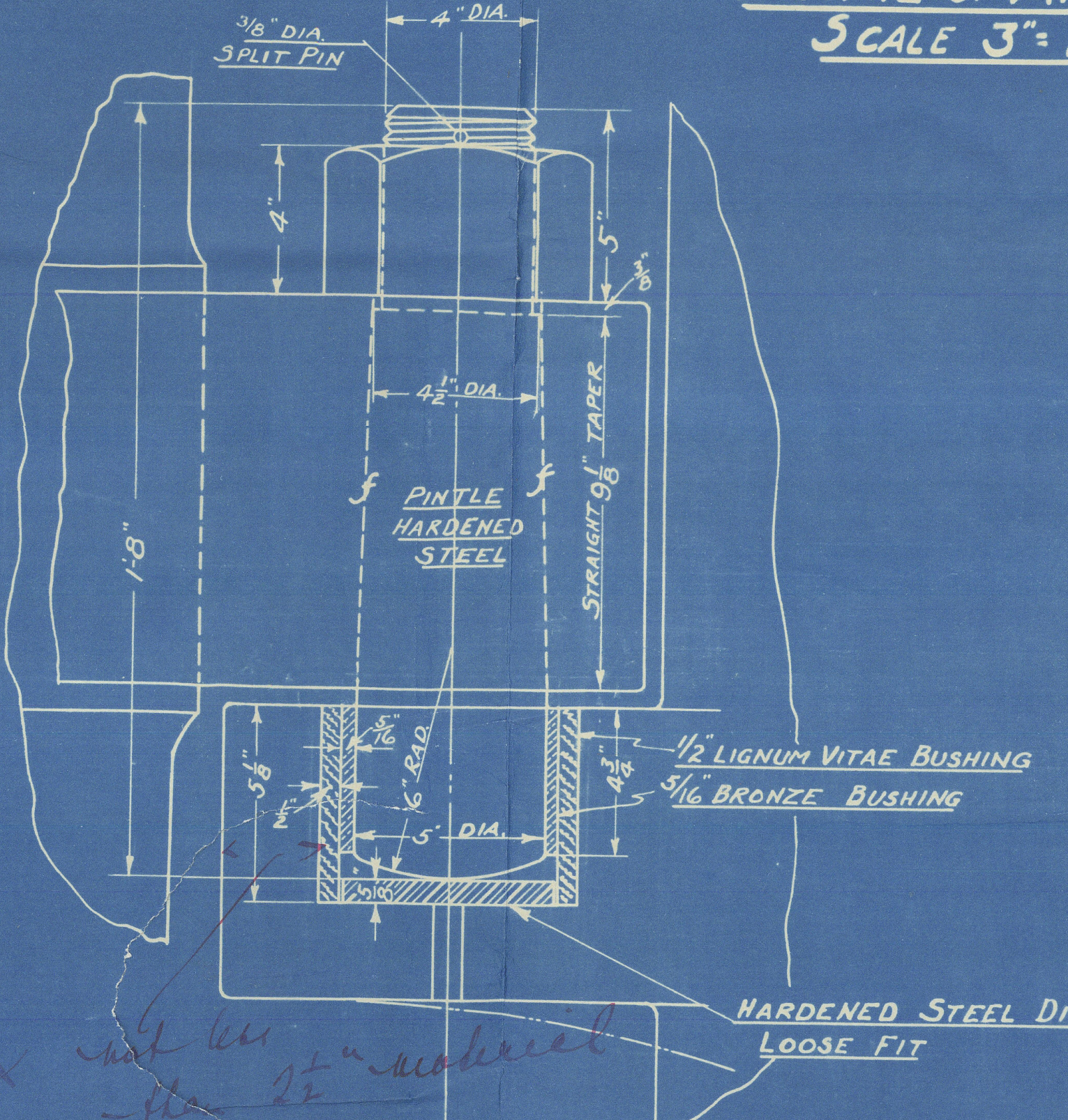

3/8" SPLIT PINS
2"×1" KEY
3" BOLTS
HEX. HEADS & NUTS
BOLTS TO BE FITTED
℄ OF MAIN PIECE
℄ OF STOCK

DETAIL of COUPLING
SCALE 1½" = 1'-0"


FOR ADDITIONAL DIMENSIONS SEE DETAIL OF BEARING PINTLES.
2'-0⅝"
8½" DIA.
10" DIA.
3/8"
1¼"

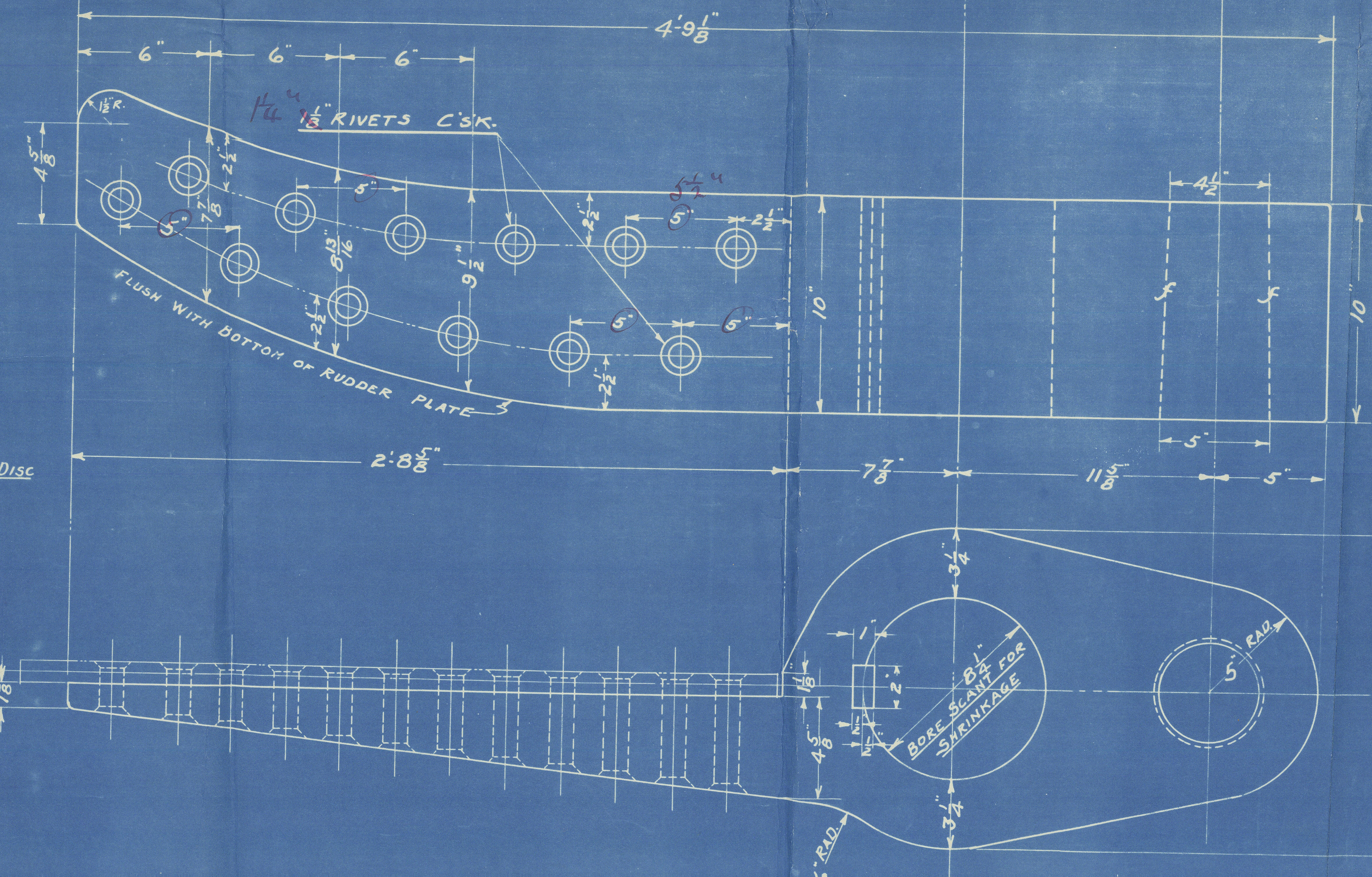
STEEL RING
FASTEN WITH 6
3/8" CAP SCREWS

DETAIL of LOCKING PINTLE
SCALE 3" = 1'-0"


3/8" DIA. SPLIT PIN
4" DIA.
4½" DIA.
PINTLE HARDENED STEEL
STRAIGHT 9⅛" TAPER
1'-8"
1/2" LIGNUM VITAE BUSHING
5/16" BRONZE BUSHING
6" RAD.
5" DIA.
HARDENED STEEL DISC LOOSE FIT

x not less than 2½" material

DETAIL of BEARING PINTLES
SCALE 3" = 1'-0"


4'-9⅛"
6"
6"
6"
1⅛" RIVETS C'SK
FLUSH WITH BOTTOM OF RUDDER PLATE
2'-8⅝"
7⅞"
11⅝"
5"
BORE SCANT FOR SHRINKAGE
5" RAD
6" RAD
14¾"

DETAIL of ARM "D"
SCALE 3" = 1'-0"

NOTES:
TOTAL AREA OF RUDDER ABAFT ℄ OF PINTLES = 94 SQ. FT.
CENTER OF GRAVITY " " " = 3'-8"
LLOYD'S NUMERAL = 345. SPEED = 10 KNOTS.
PINTLE HOLES IN ARMS TO BE BORED IN LATHE AFTER ARMS HAVE BEEN FITTED TO MAIN PIECE TO ASSURE TRUE LINE.
ARMS KEYED AND SHRUNK ON MAIN PIECE.
MATERIAL TO PASS LLOYD'S REQUIREMENTS.
MAIN PIECE, RUDDER STOCK, AND ARMS TO BE FORGED STEEL.
RUDDER ARMS TO BE HYDRAULICALLY RIVETED TO BLADE.

Rpt. 430
"Martha E. Allen"

APPROVED
OCT 31 1927
LLOYD'S REGISTER OF SHIPPING
NEW YORK

SURVEYORS COPY

STR. Nº 803
RUDDER
PRINT Nº 4300
ISSUED OCT 25 1927
DRAWING Nº 7
SCALES 3/4" - 1½" - 3" = 1'-0"
OCT. 10, 1927
Am. S.B. Co.
E.B.V.
TRACING Nº 803-7